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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/603,021	Applicant(s) STEPANIK ET AL.	
	Examiner John P. Fitzgerald	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-16 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1, 2 and 8-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,670,887 to Dungan and US 6,405,135 to Adriany et al. Dungan discloses an electronic system (Figs. 1-19) for use on a remote gas or oil well-site to detect and identify gas present in the atmosphere and transmit to location off-site data respecting the gas so identified; the system having: at least one sensor means (38) to detect and generate raw data respecting at least one noxious gas (including hydrogen sulfide and sulfur dioxide and their LEL level or ppm) (Dungan: col. 9, lines 37-43, and col. 1, lines 26-29 as recited in claims 11 and 16) present in the atmosphere; means to process the raw data (via analog-to-digital conversion (290) and identify each noxious gas detected (Dungan: col. 9, lines 9-11); a central/master communication interface and processor (18) (which may be mobile) for electronically receiving the data via a receiver/transceiver (74) from the sensors, and relays for transmitting offsite (118) (see Fig. 4), wireless local means (UHF, radio signals operating at any desired frequency, licensed or unlicensed) (248) (Dungan: col. 16, lines 17-24) (as recited in claim 12) to communicate to the central communication interface data representing the noxious gases detected; and a portable source of electrical power (note: portable sources of power, such as batteries, back-up power supplies are common and well known sources of electrical power for electronic devices), as well as solar power means for charging (Dungan: col. 12, lines 35-42 & col. 15, lines 4-22) (as recited in claim 10); means for sensing atmospheric conditions that cause anomalous output for the

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sensor means (Dungan: col. 10, line 62 to col. 11, line 5) (as recited in claim 2). Dungan further discloses employment of long distance wireless communication means (i.e. more powerful wireless signal means with higher gains than cellular phone antennas or UHF) via a satellite dish and low-earth-orbit (LEO) satellites and wherein when data messages are transmitted to the LEO satellite from the sensor means, it may be linked to a local gateway for validation and optimal routing to the recipient which would be the central/master communication interface (Dungan: col. 6, line 50 to col. 7, line 48).

Dungan does not expressly disclose the employment of the Internet (World Wide Web) for the transmission of data in conjunction with the local/long distance wireless means (as recited in claim 1); including voice communication means (as recited in claim 4) connected to the central communication interface and processor enabling the means of storing/processing/transmitting the raw data for the purposes of creating a data log respecting the nature and presence or concentration of at least one noxious gas over time (as recited in claim 9) and various aspects of wireless communications means recited in claims 13-15). Adrian et al. disclose a system and method for monitoring pollutants/contaminants within the environment (Figs. 1-6) having sensors (10) to measure the presence of the pollutants/contaminants employing the Internet (23) and Web site system (22) including storage/database to record events (as recited in claim 9), the Web/Internet communication system having secure/confidential notifications offsite to responsible parties (24), an Internet domain (i.e. IP address, as recited in claim 8) name utilized by the detections service provider using standard protocols to form a global distributed network (thus including common elements recited in claims 13-15), communications interface means (including voice (Adrian et al.: col. 6, line 62) (as recited in

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claim 4); transmitting data/voice via lines (17), satellite relay or wireless digital communication.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the Internet as a data communication means, as taught by Adriany et al., thus modifying the electronic system disclosed by Dungan, thus providing enhanced communication means in real time via the Internet.

2. Claims 3, 5-7 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,670,887 to Dungan and US 6,405,135 to Adriany et al. as applied to claim 1 above, and further in view of US 6,259,956 to Myers et al. Dungan and Adriany et al. disclose an electronic system having all of the elements stated previously. Dungan and Adriany et al. do not expressly disclose an electronic system further including a camera for taking video/digital images and their transmission (as recited in claim 3, means for detecting signal strength and suitable switching means for the long-distance wireless means (as recited in claims 5 and 6); and a call center at the off-site location. Myers et al. disclose an storage site monitoring system (Figs. 1-6) having Internet communication means via a Web server (40a) receiving information from various sensors (2, 28) for creating a HTML log (46) and reports (44) for transmitting data offsite via a call center (40b); including video cameras (52) taking digital images of the remote site which are converted to HTML image files and hyperlinked to related HTML text files (as recited in claim 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a camera/video system and a call center, as taught by Myers et al., thus modifying the electronic system disclosed by Dungan and Adriany et al., thus providing means to visually monitor the various sensor site locations remotely. In specific regards to claims 5, 6 and 19, providing means to measure signal strength and switching means is considered an

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obvious variant well within the purview of design choice of one of ordinary skill in the art, for ordinary cell-phones (i.e. cellular telephone network or wireless internet network) have indicators of signal strength and automatic switching means to provide wireless communications as well as internet access capabilities.

Response to Arguments

3. Applicant's arguments filed 12 May 2005 have been fully considered but they are not persuasive. The instant invention involves an electronic system for monitoring a gas (i.e. noxious/poisonous gas or contaminant) at a well-site having two basic elements: (1) a sensor/transducer to monitor/detect the gas; (2) a wireless communication system/network and processor for processing data (i.e. signals from the sensor/transducer) and transmitting that information, including voice data. The Dungan and Adrian et al. references both teach electronic systems for detecting gaseous contaminants including both of these elements, as well as details of the wireless communication systems/networks involving voice and data transmission from one site to another, including via the internet and/or satellite. Variations in minor details of the communication/data transmission via newer communication technology, i.e. cellular networking and/or phones are obvious variations of the wireless communication means. The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 159 6 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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See also *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (setting forth test for implicit teachings); *In re Eli Lilly & Co.*, 902 F.2d reliance on legal precedent); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings); *Ex parte Clapp*, 227 USPQ 972 (Bd. Pat. App. & Int. 1985) (examiner must present convincing line of reasoning supporting the rejection); and *Ex parte Levensgood*, 28 USPQ2d 1300 (Bd. Pat. App. & Int. 1993) (reliance on logic and sound scientific reasoning).

4. In response to applicant's argument that it would not be obvious to combine the teachings of Dungan and Adriany et al. as well as details of the wireless communication network, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, the references clearly teach related subject matter reading upon the two basic elements of the instant invention. In response to applicant's argument that the references must explicitly provide a suggestion for combining, a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference (see *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)), with skill being presumed on the part of the artisan, rather than the lack thereof (see *In re Sovish* 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985)); further, references may be combined although none of them explicitly suggests combining one with the other (see *In re Nilssen* 7 USPQ2d 1500

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(*Fed. Cir. 1989*)). It has long been the law that the motivation to combine need not be found in prior art references, but equally can be found "in the knowledge generally available to one of ordinary skill in the art." *In re Jones*, 958 F.2d 347, 351 (*Fed. Cir. 1992*) (citing *In re Fine*, 837 F.2d 1071, 1074 (*Fed. Cir. 1988*)). Furthermore, the motivation to combine can be found either in a prior art reference, or it can be implicit in the knowledge of one of ordinary skill in the art. See *In re Huston*, 308 F.3d 1267, 1280 (*Fed. Cir. 2002*); *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472 (*Fed. Cir. 1997*). Sources suggesting a combination may be: (1) the combined teachings of the prior art, (2) the knowledge of the ordinary practitioner and (3) the nature of the problem to be solved. "The test for implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (*Fed. Cir. 2000*). In *Richard Ruiz and Foundation Anchoring Systems, Inc. v. A.B. Chance Company*, No. 03-1333 (*Fed. Cir. January 29, 2004*), the court emphasized that an "express written teaching in the art" to combine references **was not required** (emphasis added). Rather, motivation may come from "the nature of a problem to be solved, leading inventors to look to references relating to possible solutions to that problem." Please further note the following from Section 2144 of the MPEP: "The rationale to modify or combine the prior art does not have to be expressly stated in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent...The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem...It is not necessary that the prior art suggest the combination to achieve the same advantage or result

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discovered by Applicant." Also Chief Judge Nies writes in a concurring opinion, "While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or the prior art specifically suggest making the combination...In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found in a specific reference". See *In re Oetiker* 977 F.2d 1443, 24 USPQ2d 1443 (Fed.Cir.1992).

5. In response to applicant's argument that the Dungan and Adriany et al. are nonanalogous arts, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both the references, as pointed out above, clearly teach upon the two basic elements of the instant invention.

6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the two references clearly teach on the two basic elements of the instant invention, as well as obvious variants of wireless communication means.

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7. In response to applicant's arguments, the recitation of the well-site has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). In the instant case, the electronic systems disclosed by Dungan and Adriany et al. will function completely and adequately in a well-site environment, detecting the presence of any gaseous element so desired by a particularly chosen sensor/transducer.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fitzgerald whose telephone number is (571) 272-2843. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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